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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/455,104	12/06/1999	RICHARD ALAN DAYAN	RP9-99-125	4653
25299	7590	03/25/2004	EXAMINER	
IBM CORPORATION			COLIN, CARL G	
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DEPT 9CCA, BLDG 002				
RESEARCH TRIANGLE PARK, NC 27709			ART UNIT	PAPER NUMBER
			2136	C

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/455,104

Applicant(s)

DAYAN ET AL.

Examiner

Carl Colin

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 13-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 13-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 December 1999 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Arguments

1. In response to communications filed on 12/23/2003, applicant cancels claims 1-12 and adds claims 13-21. The following **claims 13-21** are presented for examination.

2. The amendments to the specification, pages 2-5, filed on 12/23/2003 have been considered.

2.1 Applicant's remarks, page 8, filed on 12/23/2003, with respect to the objection of the abstract and the drawings have been fully considered. The objection to the abstract has been withdrawn. The objection to the drawings has been withdrawn with respect to the amended specifications.

2.2 Applicant's arguments, pages 8-9, filed on 12/23/2003, with respect to the rejection of claims 1-12 have been fully considered, but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 19, and the intervening claims are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claim 1 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in Paper No. 5 filed 12/23/2003. In that paper, applicant has stated in claim 13 the second input device is disabled only if the first input device is prevented" and in claim 19 "USB is disabled only in response to dedicated keyboard being disabled", and this statement indicates that the invention is different from what is defined in the claim(s) because Applicant cited on the amended specification, page 3, "the switch 80 receives instructions from the security unit 82 ... to lock or unlock the bus ... when locked the switch prevents data from reaching the USB controller 30 and the microprocessor 24. However the USB keyboard sensing unit can still monitor ... entry of password for correct password verification." The disclosure shows that the USB port is still functional for password entry (not completely disabled) while the switch protects the controller and the microprocessor and Examiner respectfully states that the disclosure does not support the condition of USB is "disabled only in response' or "disabled only if" the dedicated keyboard is being disabled.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have

been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4.1 **Claims 13-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,223,284 to **Novoa et al.**

4.2 **As per claim 13, Kim** substantially teaches a computer comprising: a processor, a memory having a memory address space, the memory address space comprising a stored program, the stored program including a power-on-self-test (POST) (see column 26, lines 33-39); a first input device operatively connected to the processor; an adapter read-only-memory (ROM) located in certain blocks of the memory address space (see column 5, lines 35-42); a control associated with the POST for preventing an input from the first input device during the POST to prevent user inputs from entering the memory (see column 6, lines 47-49 and column 11, lines 47-51); a security signature in the adapter ROM for identifying if the first input device may temporarily accept a user input (see column 1, lines 63-66 and column 3, lines 9-13); a ROM security routine for determining if user input is required and further including a test for user authorization (see column 22, lines 30-54 and column 6, line 62 through column 7, line 19); an indicator stored in the memory for permitting a user input during at least a portion of the POST, with the processor responding to the indicator and allowing a user input at the input device during POST by at least temporarily overriding the control preventing a user input during the POST if the user successfully satisfies the authorization test (column 6, line 62 through

column 7, line 19); and a second input device operatively connected to a Universal Serial Bus (USB) port in the computer, wherein the second input device is disabled only if the first input device is prevented from inputting a signal during the POST (see column 8, lines 1-9 and column 31, lines 1-7). See also column 7, lines 30-60). **Novoa et al.** discloses option to disable any input device during POST. **Novoa et al.** does not explicitly state that a second input device is disabled only if the first input device is prevented from inputting a signal. However, **Novoa et al.** teaches security option of disabling the keyboard (see column 7, lines 56-60) and another security option of disabling USB port for preventing user input (see column 8, lines 7-9), and further teaches disabling the keyboard from preventing user input during POST (column 11, lines 49-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Novoa et al.** to disable a second input device connected to the USB port only if the first input device is prevented from inputting a signal. This modification would have been obvious because one skilled in the art would have been motivated to disable a USB port in response to the dedicated keyboard being disabled in order to prevent users from transferring data through the USB interface as a measure of security (see column 7, line 62 through column 8, line 9) as suggested by **Novoa et al.**.

As per claim 14, Novoa et al. discloses the limitation of wherein the first input device is a keyboard communicating with the computer via a dedicated keyboard port (see column 6, lines 4-5 and column 11, lines 49-53).

As per claim 15, Novoa et al. discloses the limitation of wherein the keyboard is a PS/2 keyboard (see column 6, lines 4-5); a PS/2 keyboard as a standard keyboard is well known in the art.

As per claims 16 and 19, Novoa et al. substantially teaches a method and computer comprising option to disable any input device during POST via a first and second mechanism. **Novoa et al.** does not explicitly state disabling, via a first mechanism, a dedicated keyboard coupled to a dedicated keyboard port of a computer while a Power-On-Self-Test (POST) is executing in the computer; and in response to the dedicated keyboard being disabled, disabling, via a second mechanism, a Universal Serial Bus (USB) port on the computer. However, **Novoa et al.** teaches security option of disabling the keyboard (see column 7, lines 56-60) and another security option of disabling USB port for preventing user input (see column 8, lines 7-9), and further teaches disabling the keyboard from preventing user input during POST (column 11, lines 49-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disable, via a first mechanism, a dedicated keyboard coupled to a dedicated keyboard port of a computer while a Power-On-Self-Test (POST) is executing in the computer; and in response to the dedicated keyboard being disabled, disable, via a second mechanism, a Universal Serial Bus (USB) port on the computer. This modification would have been obvious because one skilled in the art would have been motivated to disable a USB port in response to the dedicated keyboard being disabled in order to prevent users from transferring data through the USB interface as a measure of security (see column 7, line 62 through column 8, line 9) as suggested by **Novoa et al.**

As per claims 17 and 18, Novoa et al. discloses the limitation of using password to lock or unlock peripheral devices, which meets the recitation of monitoring the USB port for an enabling password, the enabling password permitting the dedicated keyboard to be re-enabled and the USB port to be re-enabled (see column 31, lines 1-7; see also claim 37).

5. **Claims 20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,223,284 to **Novoa et al.** in view of US Patent 5,835,791 to **Goff et al.**

Claims 20 and 21 are similar to the rejected claims 18 and 19 except for specifying using a keyboard sensing switch for monitoring the USB port. **Novoa et al.** discloses monitoring of the port but does not disclose using a switch. It is obvious to one skilled in the art that a sensing switch can perform the locked and unlocked state disclosed by **Novoa et al.**. However, **Goff et al.** in an analogous art teaches a routing switch that monitors activity between a dedicated keyboard and a USB port (column 12, lines 27-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of **Novoa et al.** to use a keyboard sensing switch for monitoring the USB port for an enabling password, the enabling password permitting the dedicated keyboard and the USB port to be re-enabled as taught by **Goff et al.** in order to prevent users from transferring data through the USB interface as a measure of security. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Goff et al.** so as to prevent users from transferring data through the USB interface as a measure of security.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6.1 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. US Patent 6,480,097 Zinsky et al.

This patent prior art pertains to security control for a personal computer during POST.

b. US Patent 6,546,441 Lum

This patent prior art pertains to selectively disconnect input devices including keyboard and USB devices.

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6.2 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 703-305-0355. The examiner can normally be reached on Monday through Thursday and every other Friday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

cc
Carl Colin

Patent Examiner

March 12, 2004


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100